

Title (en)

CODING AND MODULATION APPARATUS USING NON-UNIFORM CONSTELLATION

Title (de)

CODIERUNGS- UND MODULATIONSVORRICHTUNG UNTER VERWENDUNG VON UNGLEICHFÖRMIGER KONSTELLATION

Title (fr)

APPAREIL DE CODAGE ET DE MODULATION UTILISANT UNE CONSTELLATION NON UNIFORME

Publication

**EP 3320633 B1 20190918 (EN)**

Application

**EP 16738392 A 20160707**

Priority

- EP 15176027 A 20150709
- EP 2016066190 W 20160707

Abstract (en)

[origin: WO2017005874A1] A coding and modulation apparatus and method are presented, particularly for use in a system according to IEEE 802.11. The apparatus comprises an encoder configured to encode input data into cell words according to a low density parity check code, LDPC, and a modulator configured to modulate said cell words into constellation values of a non-uniform constellation and to assign bit combinations to constellation values of the used non-uniform constellation, wherein said modulator is configured to use, based on the total number N of constellation points of the constellation and the code rate R, a particular non-uniform constellation, which has been optimized using the peak-to-average power ratio (PAPR).

IPC 8 full level

**H04L 1/00** (2006.01); **H04L 27/34** (2006.01)

CPC (source: EP US)

**H03M 13/1105** (2013.01 - US); **H03M 13/255** (2013.01 - US); **H04L 1/0003** (2013.01 - EP); **H04L 1/0009** (2013.01 - EP); **H04L 1/0025** (2013.01 - EP); **H04L 1/0026** (2013.01 - EP); **H04L 1/0045** (2013.01 - US); **H04L 1/0061** (2013.01 - US); **H04L 27/2614** (2013.01 - US); **H04L 27/3405** (2013.01 - EP); **H04L 27/3416** (2013.01 - US); **H04L 1/0057** (2013.01 - EP)

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